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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,311	07/07/2003	Timo Kleinwachter	HOE-764	9366
20028	7590	09/11/2007		
Lipsitz & McAllister, LLC 755 MAIN STREET MONROE, CT 06468			EXAMINER LANG, AMY T	
			ART UNIT 3731	PAPER NUMBER
			MAIL DATE 09/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/615,311

Applicant(s)

KLEINWAECHTER, TIMO

Examiner

Amy T. Lang

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

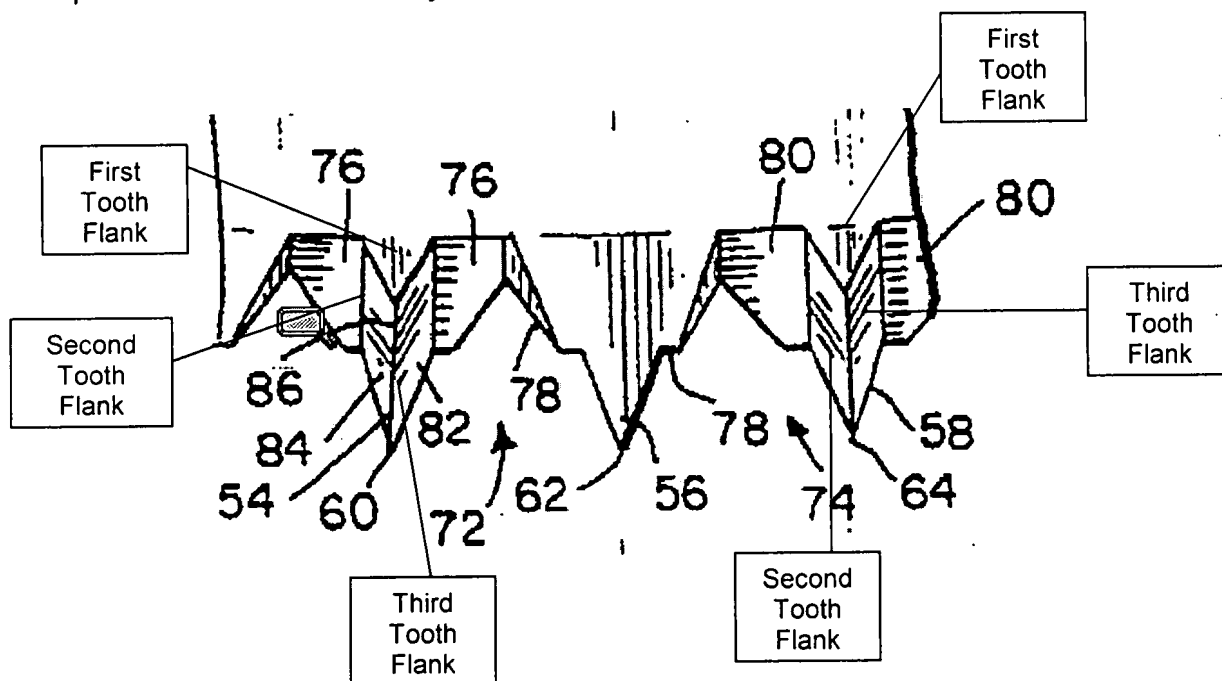
3. **Claims 1-20, 22, and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnegger (US 4,513,742) in view of McDaniel (US 5,423,845).

With regard to **claims 1, 13-15, 17-20, 22, and 27**, Arnegger discloses a saw blade (see entire document) with a holder body (44), a row of teeth (42) and a plurality of recesses (43) extending between opposite sides of the holder body (Figure 8; column 2, lines 50-52; column 3, lines 48-51). The thickness of the row of teeth is greater than the spacing between a first and second portion of the holder body (Figure 5). As shown in Figure 8, channels are disclosed between adjacent teeth in a trough shape. An indent (11) is provided in a portion of the blade remote from the row of teeth and

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connects the blade to an oscillating jaw (column 2, lines 41-43). However, Arnegger does not explicitly disclose the teeth of the saw blade.

McDaniel also discloses a saw blade (see entire document) with a holder body (36) and a row of teeth (46) (Figure 2; column 3, lines 34-45). As shown in Figure 4, the row of teeth is further disclosed as comprising alternating teeth separated by channels (72) (column 4, lines 14-27). The channels are adapted to guide cuttings from the teeth behind the row of teeth (46) (column 4, lines 27-33). Each tooth comprises first, second, and third tooth flanks located near the tip of the tooth (Figures 3 and 4). As shown below, teeth 54 and 58 have a first tooth flank that lie in the same plane and are parallel to the holder body.



The teeth of McDaniel advantageously guide cuttings away from the distal cutting area, do not trap the cuttings between teeth, and produce a dual penetration of the teeth

into the material (column 4, line 65 through column 5, line 26). Since Arnegger does not explicitly disclose the teeth of the saw blade and McDaniel teaches teeth which are advantageous to a saw blade, it would have been obvious to one of ordinary skill at the time of the invention for Arnegger to utilize the teeth of McDaniel.

With regard to **claim 2**, since the term “behind” is a relative term, it is the examiner’s position that channels (72) of McDaniel extend behind an adjacent tooth base (Figures 3 and 4).

With regard to **claim 3**, adjacent teeth 56 comprise channels (72) that include portions 78 (Figure 4). The portions extend at a height between 20% to 60% of the height of the tooth above the base.

With regard to **claims 4 and 5**, as shown in Figure 4 of McDaniel, the channel is in the form of a trough and between non-parallel tooth flanks of adjacent teeth.

With regard to **claims 6-11**, the saw blade of Arnegger comprises channels between adjacent teeth that are connected to the holder body and an additional channel (22) extending along the row of teeth (Figure 8; column 2, lines 50-52). Since the additional channel (22) is also connected to the holder body, the channels between teeth are connected to the additional channel through the holder body. Therefore, Arnegger in view of McDaniel would also have channels connected to the holder body, since McDaniel also teaches channels between adjacent teeth, and a channel extending along the row of teeth. The holder body channel (22), as shown in Figure 4 of Arnegger, comprises a plurality of channels located on a lower and upper face of the holder body. The plurality of channels is substantially parallel.

With regard to **claim 12**, although Arnegger is silent regarding the actual dimensions of the holder body channel with respect to thickness, it is shown in Figure 2 that the thickness of the holder body channel is between 15% and 35% of the holder body.

With regard to **claim 16**, as shown in Figure 3 of Arnegger and Figure 4 of McDaniel, the tooth tips of adjacent teeth are displaced relative to one another with reference to a direction of width of the holder body.

4. **Claims 23-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnegger (US 4,513,742) in view of McDaniel (US 5,361,665) and in further view of Gerber (US 4,653,373).

Arnegger in view of McDaniel discloses the invention substantially as claimed but fails to teach a saw blade composed of a stiff portion and a resilient portion, with a plurality of recesses within the blade formed along an axis of symmetry. Gerber teaches, in Figure 13, a blade 210 formed with an inner portion 230 and an outer portion 232, each composed of a material with a different hardness. Gerber also discloses, in Figure 9, a plurality of evenly spaced recesses 149. The combination of stiff and resilient materials reduces vibrations while maintaining the longevity of the blade. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the device of Arnegger with the blade of Gerber in order to reduce the vibrations generated from the blade while incorporating a high-wear material on the exterior of the blade.

The instant claim 26 recites a process of arrangement and construction of the recesses in the blade. The determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process. That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). A product-by-process limitation adds no patentable distinction to the claim, and is unpatentable if the claimed product is the same as a product of the prior art.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-20 and 22-27 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy T. Lang whose telephone number is 571-272-9057. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LoAn Thanh can be reached on 571-272-4966. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8/27/2007

ARL



LOAN H. THANH  
PRIMARY EXAMINER